

In the claims:

Please amend the claims as follows:

13 1. (Currently Amended): An apparatus ~~Apparatus~~ comprising:

a substrate;

a ground plane on the substrate, the ground plane having a slot;

transmission lines lying over the slot; and

data processing agents each connected to one of the transmission lines configured such that a first data processing agent sources a current onto a first transmission line connected to the first data processing agent, inducing a transient return current on the ground plane, propagating energy of the transient return current to the slot, inducing a transient voltage pulse onto a second transmission connected to a second data processing agent when the propagating energy encounters the second transmission line, and generating a binary digital signal in the second data processing agent from the transient voltage pulse received on the second transmission line.

2. (Original): The apparatus of claim 1 in which the slot is terminated.

3. (Original): The apparatus of claim 1 in which the transmission lines are terminated.

4. (Original): The apparatus of claim 1 in which the slot functions as a main bus trunk when excited.

5. (Original): The apparatus of claim 1 in which the data processing agents comprise processors.

6. (Original): The apparatus of claim 1 in which the data processing agents comprise chipsets.

7. (Original): The apparatus of claim 1 in which the transmission lines lie perpendicular to the slot.

8. (Original): The apparatus of claim 1 in which the data processing agents comprise signaling circuitry.

9. (Original): A method comprising:

inducing a transient return current on a reference plane in response to a driving agent sourcing a current onto a first transmission line, the current being representative of binary data; propagating energy of the transient return current to a slot in the reference plane; inducing a transient voltage pulse onto a second transmission line connected to a receiving agent when the propagating energy encounters the second transmission line; and generating a binary digital signal in the receiving agent from the transient voltage pulse received on the second transmission line.

10. (Original): A method comprising:

in a bus, sourcing a current being representative of binary data on to a first line; inducing a return current on a reference plane; and transferring energy of the return current to a slot in the reference plane.

11. (Original): The method of claim 10 further comprising:

inducing a voltage pulse on to a second transmission line from the energy in the slot; and generating a binary digital signal in a receiving agent from the voltage pulse.

12. (Original): The method of claim 10 in which sourcing is generated by a driving agent.

13. (Original): The method of claim 12 in which the driving agent is a processor.

14. (Original): The method of claim 11 in which the receiving agent is a processor.

15. (Currently Amended): An apparatus ~~Apparatus~~ comprising:

a substrate;
a ground plane on the substrate, the ground plane having a slot;
parallel arranged transmission lines lying over the slot; and
data processing agents each connected to one of the parallel arranged transmission lines
configured such that a first data processing agent sources a current onto a first transmission line connected to the first data processing agent, inducing a transient return current on the ground

plane, propagating energy of the transient return current to the slot, inducing a transient voltage pulse onto a second transmission connected to a second data processing agent when the propagating energy encounters the second transmission line, and generating a binary digital signal in the second data processing agent from the transient voltage pulse received on the second transmission line.

16. (Original): The apparatus of claim 15 in which the slot is terminated.
 17. (Original): The apparatus of claim 15 in which the parallel transmission lines are terminated.
 18. (Original): The apparatus of claim 15 in which the slot functions as a main bus trunk when excited.
 19. (Original): The apparatus of claim 15 in which the data processing agents comprise processors.
 20. (Original): The apparatus of claim 15 in which the data processing agents comprise chipsets.
 21. (Original): The apparatus of claim 15 in which the data processing agents comprise signaling circuitry.
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